

From: [PETERSON Jenn L](mailto:PETERSON.Jenn.L)
To: [Robert W. Gensemer](mailto:Robert.W.Gensemer@epa.gov); [Burt Shephard/R10/USEPA/US@EPA](mailto:Burt.Shephard@epa.gov)
Cc: [ANDERSON Jim M](mailto:ANDERSON.Jim.M@epa.gov); [David DeForest](mailto:David.DeForest@epa.gov); [Eric Blischke/R10/USEPA/US@EPA](mailto:Eric.Blischke@epa.gov); [Carrie A. Smith](mailto:Carrie.A.Smith@epa.gov)
Subject: RE: First batch of draft tissue TRVs
Date: 07/23/2008 02:31 PM

Bob,

Wouldn't it possibly change your derivation methodology, though? For example, for cadmium we are only doing invert only because cadmium screened out in the Round 2 Report. However, if cadmium screened back in (e.g. looking at Round 3 data), then it may change decisions to do a combined invert and fish SSD or stick with focusing on invert and fish separately. This may make more of a difference where you don't have much TRV data for the SSD calculation.

I think it is easier to do all at the same time, but I realize there are implications for the schedule. Do we have a Round 3 re-evaluation built into the schedule, though? And if so, when is this going to happen relative to the LWG writing the DRAFT RI report - I am assuming they need the TRVs before then?

-Jennifer

-----Original Message-----

From: Robert W. Gensemer [mailto:rgensemer@parametrix.com]
Sent: Wednesday, July 23, 2008 1:57 PM
To: PETERSON Jenn L; Shephard.Burt@epamail.epa.gov
Cc: ANDERSON Jim M; [David DeForest](mailto:David.DeForest@epamail.epa.gov); Blischke.Eric@epamail.epa.gov; Carrie A. Smith
Subject: RE: First batch of draft tissue TRVs

All: I've only been following part of this exchange since I'm at a conference today. I agree that the round 3 data will eventually have to get considered in any refined screen so we have a full and reliable list of COCs for the BERA. However, for the tissue TRVs at the moment, I'm not sure there is a good mechanism for us to evaluate the round 3 data while we are in the process of derivation. Our goal for now needs to stay focused on deriving the tissue TRVs for the chemicals mentioned in the methods memo. I fear schedule slip otherwise. However, once those are wrapped up and in LWG's hands, I'm fine with discussing and considering any new TRVs we may have "missed" because we did not yet have or evaluate the round 3 data. For now, I'd prefer to stay focused on the list at hand.

As for the values and basis for the TRVs used in the SLERA, I suspect it would be a process problem to change those after already directing LWG to use the existing numbers (and which we also used in our SLERA).

-Bob

-----Original Message-----

From: PETERSON Jenn L [mailto:PETERSON.Jenn@deq.state.or.us]
Sent: Wednesday, July 23, 2008 1:33 PM
To: Shephard.Burt@epamail.epa.gov
Cc: ANDERSON Jim M; [David DeForest](mailto:David.DeForest@epamail.epa.gov); Blischke.Eric@epamail.epa.gov; Robert W. Gensemer
Subject: RE: First batch of draft tissue TRVs

I agree. We have the Round 3 data now, and can complete our own screen for aquatic receptors. That way we will be developing a complete list of TRVs now instead of having to revisit it after a Round 3 re-evaluation. In light of our e-mail exchanges on the fish dioxin TRV, I would just ask that we make sure the TRVs used in the screen are appropriate.

-Jennifer

-----Original Message-----

From: Shephard.Burt@epamail.epa.gov [mailto:Shephard.Burt@epamail.epa.gov]
Sent: Wednesday, July 23, 2008 1:26 PM
To: PETERSON Jenn L
Cc: ANDERSON Jim M; [David DeForest](mailto:David.DeForest@epamail.epa.gov); Blischke.Eric@epamail.epa.gov; Robert W. Gensemer
Subject: RE: First batch of draft tissue TRVs

I recommend for completeness that the Round 3 data first be screened against the benchmarks used in the SLERA, and the SLERA be updated accordingly before the end of the remedial investigation. Would have to run this past Eric/Chip for approval, but given how hard we had to push to get the SLERA we have prepared by Parametrix, and how much Eric has subsequently used the SLERA, I think its worth having a final, standalone document, or at least a standalone chapter in the RI report that is the completed SLERA, up to and including Round 3 data.

Best regards,

Burt Shephard
Risk Evaluation Unit
Office of Environmental Assessment (OEA-095)

U.S. Environmental Protection Agency, Region 10
1200 6th Avenue
Seattle, WA 98101

Telephone: (206) 553-6359
Fax: (206) 553-0119

e-mail: Shephard.Burt@epa.gov

"If your experiment needs statistics to analyze the results, then you
ought to have done a better experiment"
- Ernest Rutherford

"PETERSON Jenn
L"
<PETERSON.Jenn@
eq.state.or.us>
07/23/2008 01:08
PM
Burt Shephard/R10/USEPA/US@EPA
To
cc
"ANDERSON Jim M"
<ANDERSON.Jim@eq.state.or.us>,
"David DeForest"
<deforest@parametrix.com>, Eric
Blischke/R10/USEPA/US@EPA,
"Robert W. Gensemer"
<rgensemer@parametrix.com>
Subject
RE: First batch of draft tissue
TRVs

Yea, sorry, see e-mail chain below.

-----Original Message-----

From: Shephard.Burt@epamail.epa.gov
[mailto:Shephard.Burt@epamail.epa.gov]
Sent: Wednesday, July 23, 2008 1:03 PM
To: PETERSON Jenn L
Cc: ANDERSON Jim M; David DeForest; Blischke.Eric@epamail.epa.gov;
Robert W. Gensemer
Subject: RE: First batch of draft tissue TRVs

Jennifer,

The 0.283 mg/kg in bass is for what chemical? Cadmium?

Best regards,

Burt Shephard
Risk Evaluation Unit
Office of Environmental Assessment (OEA-095)
U.S. Environmental Protection Agency, Region 10
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Seattle, WA 98101

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e-mail: Shephard.Burt@epa.gov

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"PETERSON Jenn
L"
<PETERSON.Jenn@
eq.state.or.us>
07/23/2008 12:57
PM
"Robert W. Gensemer"
<rgensemer@parametrix.com>, Burt
Shephard/R10/USEPA/US@EPA
To
cc
"ANDERSON Jim M"
<ANDERSON.Jim@eq.state.or.us>,
Eric Blischke/R10/USEPA/US@EPA,
"David DeForest"
<deforest@parametrix.com>
Subject
RE: First batch of draft tissue
TRVs

On this issue, the highest in Round 3 was a smallmouth bass with 0.283 mg/kg, which would exceed all the SLVs listed below.

-Jennifer

-----Original Message-----

From: Robert W. Gensemer [mailto:rgensemer@parametrix.com]
Sent: Tuesday, July 22, 2008 1:13 PM
To: PETERSON Jenn L; Shephard.Burt@epamail.epa.gov
Cc: ANDERSON Jim M; Blischke.Eric@epamail.epa.gov; David DeForest
Subject: RE: First batch of draft tissue TRVs

I don't know either, Jennifer. If we had a fish tissue value that exceeded 0.09, it would/should have screened in.

I agree with Burt that we should evaluate any of the new fish tissue data from round 3B against our earlier screening criteria (or the BERA TRVs if that's simpler) to be sure we've not missed something. -Bob

-----Original Message-----

From: PETERSON Jenn L [mailto:PETERSON.Jenn@deq.state.or.us]
Sent: Tuesday, July 22, 2008 10:17 AM
To: Shephard.Burt@epamail.epa.gov
Cc: ANDERSON Jim M; Blischke.Eric@epamail.epa.gov; Robert W. Gensemer
Subject: RE: First batch of draft tissue TRVs

Sorry, you are right on the 0.15 mg/kg. However, the 0.09 mg/kg is what was used in the Round 2 Report for screening. I still don't know why it didn't screen in but I have my guesses. The LWG didn't look at any concentrations in carp other than 2,3,7,8-TCDD. In any case, it would be better to flesh out an appropriate baseline number in the context of this project.

-Jennifer

-----Original Message-----

From: Shephard.Burt@epamail.epa.gov
[mailto:Shephard.Burt@epamail.epa.gov]
Sent: Tuesday, July 22, 2008 10:07 AM
To: PETERSON Jenn L
Cc: ANDERSON Jim M; Blischke.Eric@epamail.epa.gov;
rgensemer@parametrix.com
Subject: RE: First batch of draft tissue TRVs

Jennifer,

The empirical 5th percentile we found for cadmium in Dyer et al. 2000 was 0.15 mg/kg, not 0.015 mg/kg. We're not developing a fish TRV for cadmium in the BERA because using the 0.15 mg/kg value from Dyer, all of the fish screened out. We may need a cadmium in fish number if any of the Round 3 fish exceed 0.15 mg/kg.

Best regards,

Burt Shephard
Risk Evaluation Unit
Office of Environmental Assessment (OEA-095)
U.S. Environmental Protection Agency, Region 10
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"If your experiment needs statistics to analyze the results, then you ought to have done a better experiment"
- Ernest Rutherford

"PETERSON Jenn
L"
<PETERSON.Jenn@
eq.state.or.us>

07/22/2008 10:00
AM

To
Eric Blischke/R10/USEPA/US@EPA
cc
Burt Shephard/R10/USEPA/US@EPA,
<rgensemer@parametrix.com>,
"ANDERSON Jim M"
<ANDERSON.Jim@deq.state.or.us>
Subject
RE: First batch of draft tissue
TRVs

I looked over the TRVs for invertebrates, and didn't have any comments. The TRVs seem reasonable with what is in the literature. I did, however, have some comments related to developing the TRVs for invertebrates only, especially for cadmium.

Cadmium: Carp had the highest cadmium concentration at 0.108 ppm (peamouth 0.053, sculpin 0.022, largescale sucker 0.0325, chinook 0.027, smallmouth bass 0.024, northern pikeminnow 0.012). The TRV used in the Round 2 report by the LWG (5th percentile LOAEL) was 0.09 ppm. The LWG number may be a bit high for screening, given the TSC presented in the Dyer publication is 0.042 mg/kg (Shephard TSC), and 0.015 mg/kg (5th percentile literature number) for fish. Several fish exceed these values, but regardless, since carp exceed the number used in the Round 2 Report why aren't we developing a TRV for fish?

-Jennifer

-----Original Message-----

From: Blischke.Eric@epamail.epa.gov [mailto:Blischke.Eric@epamail.epa.gov]
Sent: Monday, July 21, 2008 2:26 PM
To: Shephard.Burt@epamail.epa.gov; Humphrey.Chip@epamail.epa.gov; Davoli.Dana@epamail.epa.gov; GAINER Tom; Grepo-Grove.Gina@epamail.epa.gov; PETERSON Jenn L; jeremy_buck@fws.gov; ANDERSON Jim M; Goulet.Joe@epamail.epa.gov; Smith.Judy@epamail.epa.gov; Koch.Kristine@epamail.epa.gov; MCCLINCY Matt; POULSEN Mike; Fuentes.Rene@epamail.epa.gov; Robert.Neely@noaa.gov; Sheldrake.Sea@epamail.epa.gov; tomd@ctsi.nsn.us; csmith@parametrix.com; rgensemer@parametrix.com; rose@yakama.com; erin.madden@gmail.com; jay.field@noaa.gov; Cora.Lori@epamail.epa.gov; Ader.Mark@epamail.epa.gov; BBarquin@hk-law.com; audiehuber@ctuir.com; Lisa.BlueLake@grandronde.org; sheila@ridolfi.com; Benjamin Shorr; LavelleJM@cdm.com; Mary.Baker@noaa.gov; Michael.Karnosh@grandronde.org; FARRER David G; dallen@stratus
jpeers@stratusconsulting.com; (b) (6) Bob Dexter; cunninghame@gorge.net; JMalek@parametrix.com; nancy.munn@noaa.gov; Greg.Gervais@noaa.gov

Cc: lbernardini@parametrix.com
Subject: Fw: First batch of draft tissue TRVs

As promised, here are the first set of TRVs. As I indicated on the schedule I sent out last week, internal government team members will be given one week to review these TRVs and an additional week to discuss and finalize for delivery to the LWG.

Please provide comments on this set of TRVs (Sb, Cd and As) by COB, July 28, 2008. If you have any questions, please contact me.

Thanks, Eric

----- Forwarded by Eric Blischke/R10/USEPA/US on 07/21/2008 02:22 PM -----

"Robert W.
Gensemer"
<rgensemer@parametrix.com>

07/21/2008 01:37 PM

To
Eric Blischke/R10/USEPA/US@EPA,
Burt Shephard/R10/USEPA/US@EPA
cc
David DeForest
<deforest@parametrix.com>,
"Carrie A. Smith"
<CSmith@parametrix.com>, Brad
Hermanson
<BHermanson@parametrix.com>
Subject
First batch of draft tissue TRVs

Eric and Burt: Attached is our first batch of tissue TRVs for antimony, arsenic, and cadmium that are ready to go for internal government team review. Will you be forwarding to the government team, or would you like us to do that? Let me know if the latter, but I assumed one of you would probably prefer to do the distribution, and your lists are probably more accurate than mine would be anyway.

For this batch, note that even though we have files attached here for

antimony, we are actually recommending to not use this single study as the basis of a TRV for the BERA. Its just not reliable enough in our opinion for this purpose; see the attached word file for a description of why.

Call with any questions.
-Bob

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inspired people - inspired solutions - making a difference

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(See attached file: Antimony Draft Tissue TRV (21 July 2008).doc)(See
attached file: Cadmium Draft Tissue TRV Data (21 July 2008).xls)(See
attached file: Arsenic Draft Tissue TRV Data (21 July 2008).xls)(See
attached file: Cadmium Draft Tissue TRV (21 July 2008).xls.doc)(See
attached file: Arsenic Draft Tissue TRV (21 July 2008).doc)(See attached

file: Antimony Draft Tissue TRV Data (21 July 2008).xls)